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APPLICATION NO. FILING DATE FIRST NAMED INVENTOR ATTORNEY DOCKET NO. CONFIRMATION NO. 10/658,128 09/09/2003 Daniel J. Vavrick 84208 5431 EXAMINER 23501 7590 05/04/2006 NAVAL SURFACE WARFARE CENTER, DAHLGREN DIVISION GELLNER, JEFFREY L OFFICE OF COUNSEL, CODE XDC1 PAPER NUMBER ART UNIT 17320 DAHLGREN ROAD DAHLGREN, VA 22448-5110 3643

DATE MAILED: 05/04/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
	10/658,128	VAVRICK, DANIEL J.
Office Action Summary	Examiner	Art Unit
·	Jeffrey L. Gellner	3643
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply		
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).		
Status		
<ol> <li>Responsive to communication(s) filed on 16 February 2006.</li> <li>This action is FINAL. 2b)  This action is non-final.</li> <li>Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.</li> </ol>		
Disposition of Claims		
4)  Claim(s) 1-7,9,11 and 12 is/are pending in the application.  4a) Of the above claim(s) is/are withdrawn from consideration.  5)  Claim(s) is/are allowed.  6)  Claim(s) 1-7,9,11 and 12 is/are rejected.  7)  Claim(s) is/are objected to.  8)  Claim(s) are subject to restriction and/or election requirement.  Application Papers  9)  The specification is objected to by the Examiner.  10)  The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.  Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).		
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.		
Priority under 35 U.S.C. § 119		
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>		
Attachment(s)  1) Notice of References Cited (PTO-892)  2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08 Paper No(s)/Mail Date	4) Interview Summary Paper No(s)/Mail D 5) Notice of Informal I 6) Other:	

#### **DETAILED ACTION**

Upon reconsideration of the prior art the allowability of claims 10 and 11 is withdrawn.

A rejection with new art follows. Examiner regrets any inconvenience to Applicant.

## Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-7, 9, 11 and 12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1, lines 4 and 5, there is a Markush grouping for the material that includes either finely divided metal particles or finely divided metal oxide particles, individually. This language disagrees, or contradicts, with the language of lines 5 and 6 where the claim positively claims a thermite mixture. Hence, the claim is indefinite because it is unclear whether Applicant is claiming a mixture or finely divided metal particles or finely divided metal oxide particles, individually.

#### Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 2, 9, 11, and 12 are rejected under 35 U.S.C. 102(b) as being anticipated by Schweizer et al. (US 2001/0002297 A1).

As to claims 1, 2, 9, 11, Schweizer et al. disclose a reactive material ("pyrotechnic layer" of abstract) comprising a metal foam, nickel (para. 0016 and 0061) having voids (para. 0016); a polymer ("binder" of para. 0049 and 0056) imbibed in the void area (para. 0064); and thermite disposed with the polymer (para. 0063 and 0064).

As to claim 12, Schweizer et al. disclose a reactive material ("pyrotechnic layer" of abstract) that is capable of being ordnance.

### Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 3 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schweizer et al. (US 2001/0002297 A1) in view of Niebylski (US 3,834,881).

As to claim 3, the limitations of claim 1 are disclosed as described above. Not disclosed is the metal comprising aluminum. Niebylski, however, discloses the use of aluminum as a foamed metal (col. 2 lines 1-24). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the material of Schweizer et al. by using aluminum instead of

nickel as disclosed by Niebylski so as to have a improved shock absorbency (see Niebylski at col. 1 lines 38-39).

As to claim 4, the limitations of claim 1 are disclosed as described above. Not disclosed is the metal consisting of aluminum. Niebylski, however, discloses the use of aluminum as a foamed metal (col. 2 lines 1-24). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the material of Schweizer et al. by using aluminum instead of nickel as disclosed by Niebylski so as to have a improved shock absorbency (see Niebylski at col. 1 lines 38-39).

Claims 5-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schweizer et al. (US 2001/0002297 A1) in view of Allen (US 3,309,249).

As to claims 5-7, the limitations of claim 1 are disclosed as described above. Not disclosed is polymer at least partially halogenated, tetrafluoroethylene, teflon. Allen, however, discloses the use of teflon with a binder and thermite (col. 3 lines 45 including language of claim 1). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the material of Schweizer et al. by using teflon as disclosed by Allen instead of a styrene binder depending upon specific use.

### Response to Arguments

Applicant's arguments with respect to claims 1-7, 9, 11, and 12 have been considered but are most in view of the new ground(s) of rejection.

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#### Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeffrey L. Gellner whose telephone number is 571,272,6887. The examiner can normally be reached on Monday-Friday, 8:30-4:00, alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter Poon can be reached on 571.272.6891. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). Japa 1/1/

**Primary Examiner** Art Unit 3643